

US EPA RECORDS CENTER REGION 5



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Monthly Oversight Report 38
ACS NPL Site
Griffith, Indiana
January 31, 2004 - February 27, 2004

Monthly Oversight Summary Report No. 38
ACS Superfund Site WA57, 46526.238

Reporting Period: Month of February (January 31, 2004 - February 27, 2004).

BVSPC O/S Dates: February 5, 12, and 27, 2004.

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	4	Respondent's General Contractor
U.S. Environmental Protection Agency	1	Federal Regulatory Agency
Indiana Department of Environmental Management	2	State Regulatory Agency
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Autumn Industries	1	Carbon Supplier
Austgen	1	General Contractor
Independent Environmental Services	2	Specialty Contractor
Ryan Construction	3	General Contractor
Simalabs	1	GWTP Sampling Contractor

Construction Activities

Major Activities:

- Autumn Industries and Austgen changed the granular activated carbon in the carbon vessels on February 3, 2004.
- Montgomery Watson Harza operated the groundwater treatment plant in recirculation mode until February 10, 2004.
- Montgomery Watson Harza maintained the biomass in the activated sludge tank using dog food and influent from the barrier wall extraction system.
- Simalabs and Montgomery Watson Harza collected compliance samples from the groundwater treatment plant effluent on February 9 and 10, 2004, respectively.
- Montgomery Watson Harza resumed discharging effluent from the groundwater treatment plant to the wetlands on February 10, 2004.
- Montgomery Watson Harza measured the water levels in the On-Site Containment Area Still Bottoms Pond Area in-situ soil vapor extraction system wells.

- Independent Environmental Services removed and repaired the pneumatic pump in On-Site Containment Area Still Bottoms Pond Area in-situ soil vapor extraction well SVE-69.
- Ryan Construction installed a lifeline to tie off harnesses to and a Plexi-Glass cover over the lamella clarifier.
- Montgomery Watson Harza began venting the lamella clarifier to the Global thermal oxidizer unit 2.
- Ryan Construction prepared the Durr thermal oxidizer unit 1 for disassemble and inspection.
- Montgomery Watson Harza continued to operate the Off-Site Containment Area in-situ soil vapor extraction system, processing vapors through the Global thermal oxidizer unit 2.
- U.S. Environmental Protection Agency, Indiana Department of Environmental Management, and Montgomery Watson Harza inspected the proposed wetland path areas.
- Montgomery Watson Harza held biweekly construction coordination meetings at the site on February 5, 12, and 26, 2004.

Activities Performed:

During the last reporting period, Montgomery Watson Harza (MWH) reported that the effluent sample from the groundwater treatment plant (GWTP) exceeded the discharge limit for methylene chloride. Simalabs collected water samples for analysis from several locations in the GWTP treatment train in January for process evaluation. MWH determined from these analytical results that the granular activated carbon (GAC) in the carbon vessels was spent. Autumn Industries and Austgen changed the GAC in the GWTP carbon vessels on February 3, 2004. MWH reported that during the carbon changeout, corrosion was observed on the inside of the carbon vessels. MWH reported that it would address the corrosion during a future carbon changeout. MWH continued to operate the GWTP in recirculation mode after the carbon changeout. On February, 5, 2004, MWH calibrated the pH probe for the effluent and began discharging to the wetlands to provide the capacity in the GWTP for water to be introduced into the system from the barrier wall extraction system (BWES) prior to compliance sampling. MWH reported that it sustained the biomass in the activated sludge tank during the past few weeks by adding dog food and a minimal flow of groundwater from the BWES.

On February 9, 2004, Simalabs collected an effluent sample from the GWTP. MWH reported that the results of Simalabs sample were non-detect. MWH collected a monthly compliance sample for the GWTP on February 10, 2004, for analysis by CompuChem. MWH resumed discharging to the wetlands on February 10, 2004. MWH reported on February 12, 2004, that some compounds were detected in the monthly compliance sample analyzed by CompuChem at levels below the effluent discharge limits.

MWH ceased operating the ONCA SBPA ISVE system in January because of high water levels and low vapor recovery. MWH measured the water levels in the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) in-situ soil vapor extraction (ISVE) system wells on February 11 and 12, 2004. MWH followed the health and safety procedures that it developed in July 2003 in order to monitor for vapors from the wells. MWH reported that the procedures to vent the wells and monitor the breathing zone using a photoionization detector (PID) has proven time consuming in comparison to the time involved

in reading the water level. In order to expedite the water level measurement process, MWH is evaluating using level B personal protective equipment to reduce potential exposure and to minimize the time involved with air monitoring and venting the wells. MWH reported that it is evaluating using an electric pump to increase dewatering efforts in the ONCA SBPA. MWH reported that the electric pump would be temporarily placed in either dual phase extraction (DPE) or vapor extraction wells and would dewater a localized area. MWH reported that it is also evaluating removing one of the wells to inspect the screen to see if there has been damage sustained by the wells that would result in the difficulties with dewatering the area.

MWH reported that on February 20, 2004, it received notification from the American Chemical Service (ACS) facility that product was being pumped out of SVE-69, one of the DPE wells in the ONCA SBPA ISVE system. MWH reported that ACS personnel placed sandbags around its stormwater drains located near SVE-69 to prevent product from entering the storm sewer. Upon notification, MWH shut down the ONCA SBPA ISVE system DPE wells immediately. MWH reported that it observed that product had leaked from the well and was found within 4 feet of the well. Independent Environmental Services (IES), the contractor who installed the pumps and connections for the DPE wells, was onsite on Friday, February 20, 2004, in order to inspect the pump and associated equipment. MWH reported that IES found that the discharge hose was damaged, causing product to be pumped out of the well, breaking the well cap, and then out of the protective flushmount cover. IES removed and cleaned the pneumatic pump. IES also repaired the threading on the discharge piping and the seal for the pitless adapter. MWH removed the impacted snow around the DPE well and disposed of it in a sump in the GWTP. MWH estimated that approximately 2 gallons of product leaked from the well.

Ryan Construction installed a safety lifeline over the lamella clarifier in the GWTP during the week of February 16, 2004. Ryan Construction proceeded to install a Plexi-Glass cover over the lamella clarifier to reduce volatile organic compound emissions from the unit. MWH began processing the vapors from the lamella clarifier and tanks in the Global thermal oxidizer unit 2 on Monday, February 23, 2004. MWH previously vented the vapors from the tanks to a drum containing activated carbon. MWH reported that it believes that this mitigative action will address the odors and elevated PID readings that it observed in the GWTP over the past weeks.

Ryan Construction began preparations for the disassembly of the Durr thermal oxidizer unit 1 by removing bolts and separating the heat exchanger from the oxidizer chamber. MWH reported that a crane will remove the heat exchanger from the unit on Monday, March 1, 2004. MWH reported that it will inspect the unit afterwards and determine the actions necessary to repair the unit and damaged welds to resume operation.

MWH continued to operate the Off-Site Containment Area (OFCA) ISVE system, processing vapors through the Global thermal oxidizer unit 2. MWH continued to operate the GWTP at 26 gpm. MWH reported that it removed a rolloff of solids from the filter cake press for offsite incineration in Port Arthur, Texas.

U.S. Environmental Protection Agency, Indiana Department of Environmental Management (IDEM), and MWH inspected the locations of the access paths to the monitoring wells in the wetlands on February 26,

2004. IDEM reported that if the total area of the paths exceeds 0.1 acre, then a permit must be obtained from the U.S. Army Corps of Engineers. MWH reported that it will confirm the total area of the proposed wetland paths.

Black & Veatch Special Projects Corp. (BVSPC) attended two biweekly construction coordination meetings held at the site on February 5 and 12, 2004. BVSPC was unable to attend the biweekly construction coordination meeting held at the site on February 26, 2004, because of a scheduling conflict with its annual 8-hour HAZWOPER refresher training.

Attached are BVSPC weekly reports No. 153 through 156, correspondence, log book notes, and photographs of the daily activities. BVSPC's crew conducted oversight of the major field activities on February 5, 12, and 27, 2004. BVSPC's crew attended two construction coordination meetings at the site on February 5 and 12, 2004.

Topics of Concern:

- MWH reported that the December effluent sample from the GWTP exceeded the effluent discharge limit for methylene chloride.

Concern Resolution:

- MWH changed the carbon in the carbon vessels on February 3, 2004. MWH collected a compliance sample on February 10, 2004, that confirmed that the effluent met the effluent discharge limits. MWH resumed normal operation of the GWTP on February 10, 2004.

Upcoming Activities:

- MWH to disassemble the Durr thermal oxidizer unit 1 in order to evaluate damage to the oxidizer on March 1, 2004.
- MWH to line the Durr thermal oxidizer unit 1 scrubber to prevent corrosion.
- MWH to conduct baseline sampling for its chemical oxidation treatability study in the south area on March 8, 2004.
- MWH to conduct the semiannual groundwater sampling event on March 15, 2004.
- MWH to continue operating the OFCA ISVE system and resume operating the ONCA SBPA ISVE system.
- MWH to clean and remove the pumps in the ONCA SBPA ISVE system dual phase extraction wells.
- MWH to chip the logs on the OFCA cover for placement in the wetland paths to monitoring wells.
- MWH to investigate benzene levels in the lower aquifer in the wetlands area.

Signature: Leigh Peters

Date: March 5, 2004

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Weekly Oversight Summary Report No. 153
ACS Superfund Site WA57, 46526.238

Reporting Period: Week of February 2, 2004.

BVSPC O/S Dates: February 5, 2004 (Ms. Peters).

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	2	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Autumn Industries	1	Carbon Supplier
Austgen	1	General Contractor

Construction Activities

Major Activities:

- Autumn Industries and Austgen changed the granular activated carbon in the carbon vessels on February 3, 2004.
- Montgomery Watson Harza operated the groundwater treatment plant in recirculation mode and resumed discharging effluent to the wetlands on February 5, 2004.
- Montgomery Watson Harza maintained the biomass in the activated sludge tank using dog food and influent from the barrier wall extraction system.
- Montgomery Watson Harza continued to operate the Off-Site Containment Area in-situ soil vapor extraction system, processing vapors through the Global thermal oxidizer unit 2.
- Montgomery Watson Harza held the biweekly construction coordination meeting on February 5, 2004.

Activities Performed:

During the last reporting period, Montgomery Watson Harza (MWH) reported that the effluent from the groundwater treatment plant (GWTP) exceeded the discharge limit for methylene chloride. Simalabs collected water samples for analysis from several locations in the GWTP treatment train in January for process evaluation. MWH determined from these analytical results that the granular activated carbon (GAC) in the carbon vessels was spent. Autumn Industries and Austgen changed the GAC in the GWTP carbon vessels on February 3, 2004. MWH reported that during the carbon changeout, corrosion was observed on the inside of the carbon vessels. MWH reported that it would address the corrosion during a future carbon changeout. MWH continued to operate the GWTP in recirculation mode after the carbon change. On February 5, 2004, MWH calibrated the pH probe for the effluent and began discharging to

the wetlands to provide the capacity in the GWTP in order for water to be introduced into the system from the barrier wall extraction system (BWES) prior to compliance sampling on February 9, 2004. MWH reported that it sustained the biomass in the activated sludge tank during the past few weeks by adding dog food and a minimal flow of groundwater from the BWES.

MWH reported that Ryan Construction is constructing a cover for the lamella clarifier to reduce potential volatile organic compound (VOC) emissions from the unit. MWH reported that it has ordered a support structure for contractors to tie off to during the cover installation activities. MWH reported that the support structure would be installed in the upcoming weeks.

MWH continued to operate the Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) system, processing vapors through the Global thermal oxidizer unit 2. MWH reported that it observed damage to the Durr thermal oxidizer unit 1 oxidizer and that it will disassemble the unit in the upcoming weeks in order to evaluate the damage. MWH ceased operating the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) ISVE system in order for the water level in the SBPA to return to its static level without influence from the vacuum of the ISVE system. MWH reported that it will measure the water levels in the ONCA SBPA ISVE system wells next week to determine whether the water table is being successfully lowered. MWH reported that it expects to resume operating the ONCA SBPA ISVE system after it measures the water levels.

Black & Veatch Special Projects Corp. attended the biweekly construction coordination meeting held at the site on February 5, 2004.

Topics of Concern:

- MWH reported that the December effluent sample from the GWTP exceeded the effluent discharge limit for methylene chloride and that subsequent sampling activities have confirmed the exceedence.

Concern Resolution:

- MWH changed the carbon in the carbon vessels on February 3, 2004, and resumed discharging to the wetlands on February 5, 2004. MWH scheduled compliance sampling for February 9, 2004.

Upcoming Activities:

- MWH to collect a compliance sample from the GWTP on February 9, 2004.
- MWH to measure water levels in the ONCA SBPA.
- Ryan Construction to install a safety structure and cover over the lamella clarifier to reduce VOC emissions from this unit.
- MWH to disassemble the Durr thermal oxidizer unit 1 in order to evaluate damage to the oxidizer.
- MWH to line the Durr thermal oxidizer unit 1 scrubber to minimize corrosion.
- MWH to continue operating the OFCA ISVE system and resume operating the ONCA SBPA ISVE system.

- MWH to chip the logs on the OFCA cover for placement in the wetland paths to monitoring wells.
- MWH to clean and remove the pumps in the ONCA SBPA ISVE system dual phase extraction wells.
- MWH to investigate benzene levels in the lower aquifer in the wetlands area.

Signature: Leigh Peters

Date: February 17, 2004

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**WEEKLY CONSTRUCTION MEETING MINUTES
FOR FEBRUARY 5, 2004 MEETING
AMERICAN CHEMICAL SERVICE, NPL SITE
GRIFFITH, INDIANA**

MEETING DATE: Thursday, February 5, 2004

MEETING TIME: 10:00 AM

MEETING LOCATION: ACS Site - Site Trailer

ATTENDEES: Kevin Adler - U.S. EPA
Leigh Peters - BVSPC
Pete Vagt - MWH
Todd Lewis - MWH
Lee Orosz - MWH
Chris Daly - MWH
Jon Pohl - MWH
Doug Hendrich - MWH

TOPICS:

Health and Safety Summary

No health and safety incidents have occurred at the Site since the last meeting on January 22nd. Activities at the Site included operation of the groundwater treatment plant (GWTP) in recirculation mode, operation of the Off-Site Area in-situ soil vapor extraction (ISVE) system and the Still Bottoms Pond Area (SBPA) ISVE system, and maintenance of GWTP components.

During the January 22nd construction meeting, we discussed the volatile organic compound (VOC) odors that had been noted in the GWTP recently, and the actions taken to clear them from the breathing zone in the treatment plant building. The odors have not been an issue since the GWTP was placed in recirculation mode on January 23rd. Ryan Construction is currently configuring a cover for the lamella clarifier, which appears to be the main source of the odors. However, a health and safety concern has delayed Ryan from installing the cover. In order for the cover to be installed, workers would have to work on top of the clarifier and be harnessed to a support. Currently, there is no suitable support in the GWTP that could support the workers. Therefore, MWH has contacted a company that specializes in installing support structures for this type of work. It is anticipated that the support will be installed within the next two weeks.

Groundwater Treatment Plant (GWTP) Status

On January 13th, MWH received the initial laboratory results for the December effluent sample (collected on December 29th) which indicated a methylene chloride concentration of 8.5 micrograms per liter ($\mu\text{g/L}$), exceeding the effluent discharge limit of 5 $\mu\text{g/L}$. The

U.S. EPA and IDEM were informed via telephone of the exceedence and a letter was submitted on January 16th to describe the findings and MWH response actions.

Methylene chloride is a common compound used by laboratories for cleaning equipment and the laboratory used for analyzing the effluent sample. CompuChem has had issues with methylene chloride detections in it's blanks in the past. Therefore, MWH believed that the detection could be associated with a laboratory quality assurance/quality control (QA/QC) issue so the plant was not immediately shutdown. However, an additional effluent sample was collected on January 14th and analyzed by CompuChem for VOCs on a rush turn around time to determine if the compound could be attributed to laboratory contaminants.

The results of the resample indicated a methylene chloride concentration of 11 µg/L, exceeding the discharge limit for this compound. A third sample was collected by Similabs on January 21st as a second check on CompuChem QA/QC. The results of the Similabs sampling indicated a methylene chloride concentration of 8.7 µg/L, still exceeding the discharge limit. The results seemed to confirm that the methylene chloride detections are "real" and so the GWTP was placed in recirculation mode on January 23rd until the cause of the exceedence could be determined and rectified.

Similabs also collected samples from several other locations in the GWTP with the results indicating that the granular activated carbon (GAC) might be spent. The carbon was changed on February 3rd. MWH began discharging the effluent, which consisted of water that had been recirculating through the GWTP since January 23rd, on February 5th. During the discharge, the effluent pH probe indicated that the pH was outside of the discharge range. The probe was recalibrated and indicated that the pH was within range.

MWH has scheduled the February compliance sampling of the effluent for February 9th so that the GWTP has had time to discharge some of the water that has been recirculating and can begin processing water from the Barrier Wall Extraction System (BWES) and the Perimeter Groundwater Collection System (PGCS). The U.S. EPA indicated that this approach was appropriate. MWH will contact the Indiana Department of Environmental Management (IDEM) for input on the sampling approach. Because of the issues with GWTP at the end of January, the compliance sample for January was not collected.

While the carbon was being changed, corrosion was observed on the inside of the carbon vessels. MWH will address the corrosion during a future carbon changeout.

While the GWTP has been in recirculation mode, the biomass in the activated sludge plant (ME-101) has been maintained with dog food and influent from the BWES that was brought in intermittently.

Off-Site Area/SBPA ISVE Systems

Thermal Oxidizer/Scrubber Unit 2 (Therm Ox 2) has operated continuously except for one day during the week of January 26th when the extremely cold weather caused the unit to shut down. Therm Ox 2 has been treating vapors from the Off-Site Area ISVE system

and aeration tank T-102. Thermal Oxidizer/Scrubber Unit 1 (Therm Ox 1) operated intermittently since the last meeting and has been treating vapors from the SBPA ISVE System. Therm Ox 1 also shut down during the week of January 26th when the weather was extremely cold and when Therm Ox 1 was brought back online, the unit could not maintain a constant temperature. Another inspection of Therm Ox 1 indicated cracks in the thermal oxidizer shell and moisture was observed inside the unit. The interior of the unit was also inspected and holes in the shell were observed. MWH believes that the moisture is condensation forming because the vapors being treated by the unit are warmer than the ambient temperature. Options for repairing the Therm Ox 1 are being evaluated.

MWH shutdown the SBPA ISVE system on January 30th so that the water level in this area could stabilize and we can accurately gauge the current water levels in the On-Site Area. Gauging of the wells in the On-Site Area is scheduled for the beginning of the week of February 9th.

Wetlands Access Paths

A letter was sent to the Agencies on January 20th regarding the installation of access paths from the GWTP building to several wells in the wetlands. The U.S. EPA has indicated that the placement of the access paths is appropriate. The letter that was submitted to IDEM has been forwarded to the Indiana Department of Natural Resources (IDNR) for review. MWH will contact IDEM to see if there are any comments on the proposed access paths.

Report Schedule

The following reports are scheduled to be submitted to the Agencies in February 2004:

- Final Technical Memorandum for the Off-Site Area ISVE System
- Final Construction Completion Report (CCR) for the SBPA Interim Engineered Cover
- Final CCR for the Off-Site Area ISVE System
- Final Active Treatment Systems Monitoring for Fourth Quarter 2002
- Final Phase 3 Investigation Report, South Area ORC Pilot Study
- Work Plan for Chemical Oxidation
- Proposal for Lower Aquifer Investigation

Looking Ahead

February 5, 2004 through February 12, 2004	<ul style="list-style-type: none">• GWTP/BWES/PGCS operation• Off-Site and SBPA ISVE Systems operation• Installing the lamella clarifier cover once the harness support is installed• Move logs from the Off-Site Area to the GWTP and chip them• Coat Therm Ox 1 scrubber• Routine Maintenance in the GWTP
Health and Safety Items to Monitor	<ul style="list-style-type: none">• Working in cold weather• Slip and fall hazards due to ice• Vapors in the GWTP• Harness work to be performed will installing the new lamella clarifier cover• Winter travel emergency plans

Next Construction Meeting - Thursday, February 12, 2004, 10 a.m.

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Weekly Oversight Summary Report No. 154
ACS Superfund Site WA57, 46526.238

Reporting Period: Week of February 9, 2004.

BVSPC O/S Dates: February 12, 2004 (Mr. Campbell).

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	2	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Ryan Construction	1	General Contractor
Simalabs	1	GWTP Sampling Contractor

Construction Activities

Major Activities:

- Simalabs and Montgomery Watson Harza collected compliance samples from the groundwater treatment plant effluent on February 9 and 10, 2004, respectively.
- Montgomery Watson Harza reported that the compliance sample from the groundwater treatment plant met the effluent discharge limits.
- Montgomery Watson Harza resumed discharging effluent from the groundwater treatment plant to the wetlands.
- Montgomery Watson Harza measured the water levels in the On-Site Containment Area Still Bottoms Pond Area in-situ soil vapor extraction system wells.
- Montgomery Watson Harza disassembled and inspected the damage to a portion of the Durr thermal oxidizer unit 1.
- Montgomery Watson Harza continued to operate the Off-Site Containment Area in-situ soil vapor extraction system, processing vapors through the Global thermal oxidizer unit 2.
- Montgomery Watson Harza held the biweekly construction coordination meeting on February 12, 2004.

Activities Performed:

During the January reporting period, Montgomery Watson Harza (MWH) operated the groundwater treatment plant (GWTP) in recirculation mode because the December 2003 effluent compliance sample exceeded the effluent discharge limit for methylene chloride. Austgen and Autumn Industries replaced the granular activated carbon in the carbon vessels on February 3, 2004. MWH began operating the GWTP, discharging to the wetlands on February 5, 2004, in order to provide capacity in the GWTP for water to

be introduced into the system from the barrier wall extraction system prior to the compliance sampling. Simalabs collected an effluent sample on February 9, 2004. MWH reported that the Simalabs sample results were non-detect. MWH collected a monthly compliance sample from the effluent on February 10, 2004, for analysis by CompuChem. MWH resumed discharging to the wetlands on February 10, 2004. MWH reported on February 12, 2004, that some compounds were detected in the monthly compliance sample at levels below the effluent discharge limits.

MWH reported that it ordered the safety structure for above the lamella clarifier and that it expects it onsite on February 16, 2004. MWH reported that Ryan Construction will place a cover over the lamella clarifier to reduce volatile organic compound (VOC) emissions after installing a safety lifeline. MWH also reported that Ryan Construction will reconfigure the piping in the GWTP in order for the vapors from the tanks and the lamella clarifier to be directed to either the Durr thermal oxidizer unit 1 or the Global thermal oxidizer unit 2. MWH currently vents the vapors from the tanks to a drum containing activated carbon. MWH reported that it will evaluate resuming operation of the CPI oil separator in the GWTP to address the product that is being brought into the GWTP from the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA).

MWH measured the water levels in the ONCA SBPA in-situ soil vapor extraction (ISVE) system wells on February 11 and 12, 2004. MWH followed the health and safety procedures that it developed in July 2003 in order to monitor for vapors from the wells. MWH reported that the procedures to vent the wells and monitor the breathing zone using a photoionization detector has proven time consuming in comparison to the time involved in reading the water level. In order to expedite the water level measurement process, MWH is evaluating using level B personal protective equipment to reduce potential exposure and minimize the time involved with air monitoring and venting the wells.

MWH disassembled and inspected a portion of the Durr thermal oxidizer unit 1 to evaluate the damage sustained by the oxidizer. MWH reported that it is unable to fully assess the damage and that it plans to bring a crane onsite to disassemble the unit in the upcoming weeks. MWH continued to operate the Off-Site Containment Area (OFCA) ISVE system processing vapors through the Global thermal oxidizer unit 2.

MWH reported that it is waiting for approval from the Indiana Department of Environmental Management in order to place wood chips in the wetland area to maintain the paths to the monitoring wells. MWH reported that it is interested in moving the logs on the OFCA cover in the upcoming weeks when the cover is still frozen.

Black & Veatch Special Projects Corp. attended the biweekly construction coordination meeting held at the site on February 12, 2004.

Topics of Concern:

- MWH reported that the December effluent sample from the GWTP exceeded the effluent discharge limit for methylene chloride.

Concern Resolution:

- MWH changed the carbon in the carbon vessels on February 3, 2004. MWH collected a compliance sample on February 10, 2004, that confirmed that the effluent met the effluent discharge limits. MWH resumed normal operation of the GWTP on February 10, 2004.

Upcoming Activities:

- Ryan Construction to install a safety structure and cover over the lamella clarifier to reduce VOC emissions from this unit.
- MWH to disassemble the Durr thermal oxidizer unit 1 in order to evaluate damage to the oxidizer.
- MWH to line the Durr thermal oxidizer unit 1 scrubber to prevent corrosion.
- MWH to continue operating the OFCA ISVE system and resume operating the ONCA SBPA ISVE system.
- MWH to clean and remove the pumps in the ONCA SBPA ISVE system dual phase extraction wells.
- MWH to chip the logs on the OFCA cover for placement in the wetland paths to monitoring wells.
- MWH to investigate benzene levels in the lower aquifer in the wetlands area.

Signature: Leigh Peters

Date: February 17, 2004

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**WEEKLY CONSTRUCTION MEETING MINUTES
FOR FEBRUARY 12, 2004 MEETING
AMERICAN CHEMICAL SERVICE, NPL SITE
GRIFFITH, INDIANA**

MEETING DATE: Thursday, February 12, 2004

MEETING TIME: 10:00 AM

MEETING LOCATION: ACS Site – Site Trailer

ATTENDEES: Kevin Adler – U.S. EPA
Larry Campbell – BVSPC
Pete Vagt – MWH
Rob Adams – MWH
Lee Orosz – MWH
Chris Daly – MWH
Jon Pohl – MWH
Chad Smith – MWH
Doug Hendrich – MWH
Amy Clore – MWH

TOPICS:

Health and Safety Summary

No health and safety (H & S) incidents have occurred at the Site since the last meeting on February 5th. Activities at the Site included operation of the groundwater treatment plant (GWTP) and operation of the Off-Site Area in-situ soil vapor extraction (ISVE) system. The safety support structure for the work to install the lamella clarifier cover is on order and should arrive on February 16th.

Water levels were collected from the ISVE wells on February 10th and 11th. The current H & S procedures for collecting the water levels involve opening the well and allowing it to vent for several minutes, then taking a reading with a photoionization detector (PID), and collecting a Draeger test for benzene if the PID reading is greater than 5 parts per million (ppm). The total H & S procedure takes approximately 20 minutes whereas the time required to actually collect the water level would be about one minute. MWH is looking into ways to expedite the water level collection process while still maintaining an appropriate level of safety for the field personnel. One proposed method would involve using a cascade level B air supply. The Agencies will be informed of any proposed procedural changes as they are being developed.

Once the GWTP was placed back in normal operating mode, emissions from the lamella clarifier reoccurred. The emissions are coming from free-phase liquid that is coming

through the oil/water separator and accumulating in the lamella clarifier. A PID reading of 2 ppm was collected at the top of the clarifier. This is lower than readings collected before the GWTP was placed in recirculation mode. In addition to the installation of the cover over the lamella clarifier to control the emissions, MWH is looking into bringing the CPI clarifier back online to remove additional oils. The GWTP building is being vented regularly to maintain safe conditions inside the building.

Groundwater Treatment Plant (GWTP) Status

The GWTP is currently operating at 26 gallons per minute (gpm). The effluent of the GWTP was discharged to the wetlands on February 5th in order to collect an effluent compliance sample on February 9th. However, because the necessary sampling equipment was not received by CompuChem (the lab listed in the QAPP), the compliance sample was not collected until February 10th. A volatile organic compound (VOC) sample was collected by Similabs on February 9th and analyzed on a rush turn around. The GWTP was placed back into recirculation mode after the Similabs sample was collected and analyzed. The results of the Similabs sample, which were received later Monday afternoon, showed no VOC detections. Based on this data, the effluent GWTP switched from recirculation mode to begin normal discharge again on February 10th. The results of the CompuChem VOC sample were received on February 12th and indicated low-level detections of a few VOC compounds but none exceeding the discharge limits.

Off-Site Area/SBPA ISVE Systems

Thermal Oxidizer/Scrubber Unit 2 (Therm Ox 2) is treating vapors from the Off-Site ISVE system and is functioning well with no issues. The Still Bottoms Pond Area (SBPA) ISVE system is currently offline while water levels are being collected. The water levels were collected on February 10th and 11th. The water level data will be evaluated in order to develop a short term operating plan for the optimization of the SBPA ISVE system. This operating plan will be implemented the week of February 16th.

Another evaluation of Thermal Oxidizer/Scrubber Unit 1 (Therm Ox 1) has indicated that the unit will need to be partially disassembled for inspection and potential repairs. This disassembly will require the use of a crane. Once Ryan Construction has completed the cover for the lamella clarifier, they will begin work on disassembling Therm Ox 1.

Wetlands Access Paths

After talking with Indiana Department of Environmental Management (IDEM) regarding the wetlands access paths, IDEM indicated that the plan appeared to be a feasible solution to both the removal of tree trunks and the maintenance of pathways to monitoring wells west of the ACS Site. IDEM requested that the letter be sent to IDEM and have a copy sent to the U.S. EPA. This correction was made and the letter was faxed and sent to both Agencies. MWH will await final IDEM approval of the plan prior to performing the work.

Looking Ahead Schedule

February 13, 2004 through February 26, 2004	<ul style="list-style-type: none">• GWTP/BWES/PGCS operation• Off-Site and SBPA ISVE Systems operation• Therm-Ox 1 repair• Cover installation on the lamella clarifier• Wetlands access path, pending Agency approval•
Health and Safety Items to Monitor	<ul style="list-style-type: none">• Safety risks related to Therm-Ox 1 repair, i.e. crane usage will be addressed each morning at safety meetings• Lamella clarifier cover installation may involve exposure to vapors and harness work will be necessary• Slips, trips and falls risk associated with stump removal for access path.

Next Construction Meeting – Thursday, February 26, 2004, 2 pm

ALC/JDP/RAA/PTV

J:\209\0601 ACS\0202 MWA PM\Meeting Minutes 2004\Meeting Minutes 02-12-04.doc

Weekly Oversight Summary Report No. 155
ACS Superfund Site WA57, 46526.238

Reporting Period: Week of February 16, 2004.

BVSPC O/S Dates: Cancelled because of limited site activities.

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	2	Respondent's General Contractor
Ryan Construction	3	General Contractor
Independent Environmental Services	2	Specialty Contractor

Construction Activities

Major Activities:

- Ryan Construction installed a lifeline to tie off harnesses and began installing a Plexi-Glass cover over the lamella clarifier.
- Independent Environmental Services removed and repaired the pneumatic pump in On-Site Containment Area Still Bottoms Pond Area in-situ soil vapor extraction well SVE-69.
- Montgomery Watson Harza continued to operate the Off-Site Containment Area in-situ soil vapor extraction system, processing vapors through the Global thermal oxidizer unit 2.

Activities Performed:

Ryan Construction installed a safety lifeline over the lamella clarifier in the groundwater treatment plant (GWTP). Ryan Construction began installing a Plexi-Glass cover over the lamella clarifier to reduce volatile organic compound (VOC) emissions from the unit. During previous weeks, Montgomery Watson Harza (MWH) reported that it observed elevated photoionization detector readings and odors in the GWTP emanating from the lamella clarifier. MWH reported that it will direct the vapors from the clarifier to the thermal oxidizer units. MWH reported that it plans to test operation of the venting system next week.

MWH reported that on February 20, 2004, it received notification from the American Chemical Service (ACS) facility that product was being pumped out of SVE-69, one of the dual phase extraction (DPE) wells in the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) in-situ soil vapor extraction (ISVE) system. MWH reported that ACS personnel placed sandbags around its stormwater drains located near SVE-69 to prevent product from entering the storm sewer. Upon notification, MWH shut down the ONCA SBPA ISVE system DPE wells immediately. MWH reported that it observed that product had leaked from the well and was found within 4 feet from the well. Independent Environmental Services (IES), the contractor who installed the pumps and connections for the DPE wells, was onsite on

Friday, February 20, 2004, in order to inspect the pump and associated equipment. MWH reported that IES found that the discharge hose was damaged, causing product to be pumped out of the well, breaking the well cap, and then out of the protective flushmount cover. IES removed and cleaned the pneumatic pump. IES also repaired the threading on discharge piping and the seal for the pitless adapter. MWH removed the impacted snow around the DPE well and disposed of it in a sump in the GWTP. MWH estimated that approximately 2 gallons of product leaked out of the well.

MWH continued to operate the Off-Site Containment Area ISVE system, processing vapors through the Global thermal oxidizer unit 2. MWH did not operate the ONCA SBPA ISVE system because of elevated water levels in the SBPA and the inability to pull vapors from the wells. MWH also continued to operate the GWTP at 26 gpm. MWH reported that it removed a rolloff of solids from the filter cake press for offsite incineration in Port Arthur, Texas.

Topics of Concern:

- None to report.

Concern Resolution:

- None to report.

Upcoming Activities:

- Ryan Construction to complete installation of a Plexi-Glass cover over the lamella clarifier.
- MWH to start the vapor extraction system for the lamella clarifier.
- MWH to disassemble the Durr thermal oxidizer unit 1 in order to evaluate damage to the oxidizer.
- MWH to line the Durr thermal oxidizer unit 1 scrubber to prevent corrosion.
- MWH to continue operating the OFCA ISVE system and resume operating the ONCA SBPA ISVE system.
- MWH to clean and remove the pumps in the ONCA SBPA ISVE system dual phase extraction wells.
- MWH to chip the logs on the OFCA cover for placement in the wetland paths to monitoring wells.
- MWH to investigate benzene levels in the lower aquifer in the wetlands area.

Signature: Leigh Peters

Date: March 1, 2004

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Weekly Oversight Summary Report No. 156
ACS Superfund Site WA57, 46526.238

Reporting Period: Week of February 23, 2004.

BVSPC O/S Dates: February 27, 2004 (Ms. Peters).

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	3	Respondent's General Contractor
U.S. Environmental Protection Agency	1	Federal Regulatory Agency
Indiana Department of Environmental Management	2	State Regulatory Agency
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Ryan Construction	3	General Contractor
Simalabs	1	GWTP Sampling Contractor

Construction Activities

Major Activities:

- Ryan Construction completed installing a Plexi-Glass cover over the lamella clarifier.
- Montgomery Watson Harza began venting the lamella clarifier to the Global thermal oxidizer unit 2.
- Ryan Construction prepared the Durr thermal oxidizer unit 1 for disassembly and inspection.
- U.S. Environmental Protection Agency, Indiana Department of Environmental Management, and Montgomery Watson Harza inspected the proposed wetland path areas.
- Montgomery Watson Harza operated the Off-Site Containment Area in-situ soil vapor extraction system processing vapors through the Global thermal oxidizer unit 2.
- Montgomery Watson Harza held the biweekly construction coordination meeting at the site on February 26, 2004.

Activities Performed:

Ryan Construction completed installing the Plexi-Glass cover over the lamella clarifier to reduce volatile organic compound emissions from the unit. Montgomery Watson Harza (MWH) began processing the vapors from the lamella clarifier in the Global thermal oxidizer unit 2 on Monday, February 23, 2004.

MWH reported that it believes that this mitigative action will address the odors and elevated photoionization detector readings that it observed in the groundwater treatment plant (GWTP) over the past weeks.

Ryan Construction began preparations for the disassembly of the Durr thermal oxidizer unit 1 by removing bolts and separating the heat exchanger from the oxidizer chamber. MWH reported that a crane will remove the heat exchanger from the unit on Monday, March 1, 2004. MWH reported that it will inspect the unit afterwards and determine the actions necessary to repair the unit and damaged welds in order to resume operation of the unit.

U.S. Environmental Protection Agency, Indiana Department of Environmental Management (IDEM), and MWH inspected the locations of the access paths to the monitoring wells in the wetlands. IDEM reported that if the total area of the paths exceeds 0.1 acre, then a permit must be obtained from the U.S. Army Corps of Engineers. MWH reported that it will confirm the total area of the proposed wetland paths.

MWH continued to operate the Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) system processing vapors through the Global thermal oxidizer unit 2. MWH continues to not operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) ISVE system because of elevated water levels. MWH reported that it is evaluating using an electric pump to increase dewatering in the ONCA SBPA. MWH reported that the electric pump would be temporarily placed in either dual phase extraction or vapor extraction wells and would dewater a localized area. MWH reported that it is also evaluating removing one of the wells to inspect the screen to see if there has been damage sustained by the wells that would result in the difficulties with dewatering the area.

MWH held the biweekly construction coordination meeting at the site on February 26, 2004. Black & Veatch Special Projects Corp. was unable to attend because of a scheduling conflict with its annual 8-hour HAZWOPER refresher training.

Topics of Concern:

- None to report.

Concern Resolution:

- None to report.

Upcoming Activities:

- MWH to disassemble the Durr thermal oxidizer unit 1 in order to evaluate damage to the oxidizer on March 1, 2004.
- MWH to line the Durr thermal oxidizer unit 1 scrubber to prevent corrosion.
- MWH to conduct baseline sampling for its chemical oxidation treatability study in the south area on March 8, 2004.
- MWH to conduct the semiannual groundwater sampling event on March 15, 2004.
- MWH to continue operating the OFCA ISVE system and resume operating the ONCA SBPA ISVE system.
- MWH to clean and remove the pumps in the ONCA SBPA ISVE system dual phase extraction wells.

- MWH to chip the logs on the OFCA cover for placement in the wetland paths to monitoring wells.
- MWH to investigate benzene levels in the lower aquifer in the wetlands area.

Signature: Leigh Peters

Date: March 1, 2004

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**WEEKLY CONSTRUCTION MEETING MINUTES
FOR FEBRUARY 26, 2004 MEETING
AMERICAN CHEMICAL SERVICE, NPL SITE
GRIFFITH, INDIANA**

MEETING DATE: Thursday, February 26, 2004

MEETING TIME: 2:00 PM

MEETING LOCATION: ACS Site - Site Trailer

ATTENDEES: Kevin Adler - U.S. EPA
Prabhakar Kasarabada - IDEM
Aaron Potts - Environ
Pete Vagt - MWH
Rob Adams - MWH
Lee Orosz - MWH
Chris Daly - MWH
Jon Pohl - MWH
Chad Smith - MWH
Doug Hendrich - MWH

TOPICS:

Health and Safety Summary

On February 20th, members of the ACS Facility night crew noticed sludge coming out of dual phase extraction (DPE) well 69 at approximately 1:30 AM. The crew placed sandbags around stormwater drains near the well and placed caution tape around the area. ACS crew then called Lee Orosz to report the incident. Lee received the message at 6:00 AM, at which time he shut down the well pumps via a remote connection. When Lee arrived at the site, the sludge extended 4 to 5 feet away from the well. It is estimated that a maximum of two gallons of sludge spilled out of the well. It was collected and brought to the groundwater treatment plant (GWTP) for treatment. An inspection of the well indicated that the cause of the spill was a corroded discharge pipe.

The pipe and pump were repaired and put back into service. In order to prevent this type of the spill in the future, MWH will implement routine inspections of well appurtenances. To improve the response time to such incidences, the ACS Facility has been given Todd Lewis's telephone number so that he may be contacted if there is a delay in reaching Lee. Todd has the capability of accessing the GWTP controls remotely.

The lock out/tag out procedures at the Site have been revised to reflect upcoming electrical work in the GWTP.

The cover on the lamella clarifier was completed on February 24th and Therm Ox 2 has been treating the collected vapors. Odors within the GWTP have decreased since the cover was installed. MWH will implement routine PID monitoring to measure VOCs in the GWTP buildings.

The material safety data sheets (MSDS) for all the chemicals used at the Site have been updated.

Other activities at the Site included operation of the GWTP and operation of the Off-Site Area in-situ soil vapor extraction (ISVE) system.

Groundwater Treatment Plant (GWTP) Status

The GWTP is currently operating at 26 gallons per minute (gpm). There have been no issues with the GWTP since the last meeting on February 12th. Routine maintenance has been performed on various GWTP components.

A filled roll-off box of filter cake was shipped to Port Arthur, Texas for disposal on February 20th.

Off-Site Area/SBPA ISVE Systems

Thermal Oxidizer/Scrubber Unit 2 (Therm Ox 2) is treating vapors from the Off-Site ISVE system, the lamella clarifier, and aeration tank T-102. Therm Ox 2 has been functioning with no issues since the last meeting on February 12th.

Disassembly of Thermal Oxidizer/Scrubber Unit 1 (Therm Ox 1) began on February 25th for further inspection and repair. A crane lift is scheduled for May 1st to complete disassembly of the unit. MWH anticipates the repairs to the Therm Ox 1 may require welding cracked joints and applying a specialty coating to the interior of the unit.

The water level gauging that was performed in the Still Bottoms Pond Area (SBPA) during February indicated that many of the well screens are submerged below present water table levels. MWH will evaluate the well pumps and possibly remove a well for inspection in order to further evaluate and optimize the SBPA ISVE system.

Wetlands Access Paths

Marty Maupin of the Indiana Department of Environmental Management (IDEM) was on-site on February 26th to inspect the areas for the proposed wetlands access paths. He indicated that the total area of the paths should be kept under one-tenth of an acre otherwise an Army Corps of Engineers permit would be required that would involve further investigations, planning, and reporting. If the total area remains less than one-tenth of an acre, only an IDEM permit would be required. A calculation of the proposed pathway area shows that it will be less than one-tenth of an acre.

MWH will begin moving and cutting the logs currently stored in the Off-Site Area as weather permits.

1st Quarter 2004 Groundwater Sampling

The 1st Quarter 2004 Groundwater Sampling event is scheduled for the week of March 15th. A total of 32 wells will be sampled and the event will take six to seven days. MWH will contact the residents of all properties with off-site wells prior to sampling to gain access to these properties.

Chemical Oxidation

The preliminary baseline sampling for the chemical oxidation is scheduled for the week of March 8th. A portion of the samples collected will be sent to the chemical oxidation product vendor, so that they can perform a bench scale study. All work done in roadways will be cleared with the Griffith Public Works Department.

Looking Ahead Schedule

February 27, 2004 through March 11, 2004	<ul style="list-style-type: none">• GWTP/BWES/PGCS operation• Off-Site and SBPA ISVE Systems operation• Therm-Ox 1 repair• 1st Qtr. Groundwater Sampling• Wetlands access path, pending Agency approval• Chemical oxidation baseline sampling
Health and Safety Items to Monitor	<ul style="list-style-type: none">• Safety risks related to Therm-Ox 1 repair including electrical and physical• Chainsaw work associated with the wetlands access paths

Next Construction Meeting – Thursday, March 11, 2004, 10 AM

JDP/PJV/RAA/GAL/mbm

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(46)

1/24/04

Life Effects

from December. Going to verify results by sampling conducted by Simulabs - results today; sample collected 1/21/04. MWH calculated documentation regarding sample results. MWH also reviewing O&M logs. MWH also evaluating receiving the free product.

ISVE Thermox 2 processing ANCA ISVE and T102 vapors. Thermox 1 running periodically, corrosion issues in scrubber, MWH looking at installing liner/coating. MWH bringing thermox 1 up to temp. will continue operation of systems through Thermox 1.

MWH sampling. MWH meeting with farmer b/c of wells in corn fields. MWH proposing paths to MWH ^{or} To evaluate paths into wetlands.

Look Ahead: Address air emissions in GWIP; More logs from ANCA; Thermox 1 coating for scrubber.

H+S Look Ahead: Air monitoring in GWIP

1040 Mtg. Conclude; next mtg 2/5/04 @ 1000.
1100 w/ into i. Campbell on site activities
1135 left site for day

3/2/04

(47)

2/5/04

J. J. P. P.

0830 Arrive onsite; 25°F; Cloudy

Personnel Present:

Dong Henriks MNH

Lee Orosz MNH

Leigh Peters BVSPC

L. Orosz reported carbon changeout on 2/3/04; GWIP in receive mode, MWH tracking pH to see if can resume discharging effluent to wetlands. MWH observing high pH - to check probe.

0843 Roll 52 Photo 3 facing NW at L. Orosz cleaning probe for pH measurement

0845 Roll 52 Photo 5 facing NW showing L. Orosz testing pH probe in buffer solution - MWH to recalibrate.

0900 MWH recalibrating pH probe on effluent discharge line. MWH reported Condensate had been accumulating in Thermox 1; unit down; MWH removed portion of cover to heat exchanger.

0905 Roll 52 Photo 6 facing N of Thermox 1 heat exchanger

0906 Roll 52 Photo 7 facing N of frozen water in heat exchanger.

0915 Work on reports

J. J. P. P.

(48)

2/5/03

Lyle & Peter

1000

Weekly Crust Meeting

Attendees * on previous plus:

Pete Vagt MNH Todd Lewis MNH

Jon Pohl MNH Chris Daly MNH

Kevin Adler EPA Mark Travers Environ

H+S. No major issues. Since plant in recirculation mode, not bringing in new water + not observing VOC emissions.

Lifeline tube installed over lamella clarifier in order for Ryan to install cover.

MNH to pass vapors through either a carbon unit or the thermox. Carbon in GAC vessels safely changed on Tuesday.

GWTP: Recirculation mode since 1/23

Carbon changeout 2/3. MNH observed

corrosion in carbon units, may want to recalc. MNH recalibrated effluent pH

probe and discharged this morning.

MNH fed bugs dog food + some water

from BWES. Lost some bugs, but

maintained population. MNH to

discharge until 2/9 - bring in new

water + resample effluent for methylene

chloride. MNH reported that it does

not have a compliance sample for Jan

Lyle & Peter

(49)

2/5/03

Lyle & Peter

Thermox: Unit 2 running on OFCA/T702.

system registered faults on coldest morning last week, stopped. System restarted next day and operating ok. MNH experiencing problems with thermox 1; observed condensate/water depositing + freezing causing damage to welds. Also could not bring unit up to temp. MNH removed back end - shell compromised, but heat exchanger looked ok. MNH to pull apart and inspect. MNH also to line scrubber.

Wetland trail work: waiting on IDER/IDNR comments re map. EPA then to see problem with proposal.

ENCAISVE: system shut down 1/30 in order for MNH to take water level next week. MNH to resume operating afterwards.

Look Ahead: Install lifeline, cover over clarifier, coating in scrubber, Resume GWTP operation.

Look Ahead H+S: Lifeline; water levels; scrubber coating.

1040 Mtg conclude - next mtg 2/12/04 @ 10 am.

1050 Update L. Campbell on site activities.

(50)

2-12-04

0955 Arrive onsite, 22°F cold
clear, calm, sunny

Personnel on site

Lee Orosz MWH
Jerry Clark Ryan
Doug Henrichs MWH
Mike Chenoweth Simulab
Larry Campbell BVSPL

1005 Weekly Const. Mtg.

Attendees:

Lee Orosz	MWH	Site
Doug Henrichs	MWH	Site
Larry Campbell	BVSPL	Site
Kevin Allen	EPRI	Phone
Pete Vagt	MWH	Other-Phone
Rob Adams	MWH	Other-Phone
John Pohl	MWH	Other-Phone

HAS - No issues since last Mtg.

- Safety line for installing cover on lamella clarifier is in order - should arrive 2/16 & MWH/Ryan will install
- HAS precautions for taking water level readings in ONCA wells is v. time

Jim Campbell

(51)

Consuming. After removing well plug use PID to measure VOC conc. If > 5 ppm, then take Dragger tube sample for benzene & wait 20 min. for results. Actual water level measurement is only 1-2 minutes. MWH considering doing measurements in Level B SCBA to expedite process

- Still observing odor in GWTP - getting emissions from lamella clarifier. Observed some oil in clarifier. May need to reactivate the OPI oil separator.

GWTP - Currently operating @ 26 gpm

- On Monday 2/9, Simulab collected effluent sample & analyzed for VOC - all were non detect. But plant remained in recirculation mode. Monthly compliance sample taken & sent to CompLab. Results arrived today. There were detections, but all much less than discharge permit limits. Thus started discharging to wet lands.

- Noted heavy concentration of oil in clarifier - need to work on fixing

Jim Campbell

(52)

its operation
ISVE Systems

- OECA ISVE & Aeration

Tank vapors being processed
thru Global Thermox 2 &
working well

- BNCA SBPA ISVE system off
because of high water levels
in that area. Will evaluate
recent water level measurement to
assess impact of no vacuum applied
for few days.

- Thermox 1 tenderizer was
inspected for problems w/ welds.
Concluded more thorough
disassembly & inspection w/ V
be required to assess damage.

Wetland Access Paths

Letter to EPA will be resub
to IDEM seeking their
approval to place wood chips
in paths in wetland.
mwt would like to move stumps
from OECA while cover is
frozen

M Campbell

(53)

Look Ahead

- Thermox 1 inspection & repair
- GWTP venting system
- Access path clearing & relocate logs
- Chemox proposal s/b out next week

Look Ahead Hets

- Thermox 1 inspection w/ V require
crane to lift heavy unit
- Venting system tie to installation
concern about fails, etc.

Next Mtg 2-26-04 @ 2 PM

Kevin will attend

Senior EPA officials will visit site
in March or April to inspect
for construction completion

Mtg completion @ 10/25

1100 Observed MWH & Ryan change
filter cartridges in micro filtration
unit.

1158 Left site

M Campbell

(54)

2/27/04

J. E. Peters

0740

Arrive onsite; 30°F; Sunny,
Personnel onsite:

Lee Cross MWH

Terry Frisk Ryan

Dave Hinkel Ryan

Jerry Clark Ryan

Leigh Peters BRSDC

Spoke w/ L. Cross - Ryan onsite
prepping for disassembly of thermox
1. Crane scheduled for 3/1/04.

Ryan completed work over lamella and
installed safety line. SVE-69 pump
problems ~~2/19/04~~ 2/19/04 - Product released
from well - MWH removed impacted
material + disposed of. IES removed
and cleaned pump - replaced last week
on 2/20/04. EPA + IDEM onsite yesterday
for construction meeting and
inspection of wetlands.

0759 Roll 53 Photo 1 facing SE of lifeline
attached to steel support beam for lamella
clarifier

0800 Roll 53 Photo 2 facing S of Plexiglass
cover over clarifier

0801 Roll 53 Photo 3 facing S of Plexiglass

J. E. Peters

(55)

2/27/04

J. E. Peters

over lamella and vent pipe for vapors to
thermox 2.

0802 Roll 53 Photo 4 facing S of cover over
lamella

0803 Roll 53 Photo 5 facing SE of product inside
clarifier.

0801 Roll 53 Photo 6 facing SE of entire
lifeline over lamella clarifier.

Observed Ryan prepping for thermox 1
disassembly. MWH to remove heat exchanger
portion with crane - oxidizer chamber to
remain in location.

0810 Roll 53 Photo 7 facing NE of failed, cracked
weld on heat exchanger

0815 Roll 53 Photo 8 facing NE of Ryan jacking
up oxidizer chamber to separate from heat
exchanger.

0835 Went to ONCA SBPA and inspected interim
cover and SVE well field

0843 Roll 53 Photo 9 facing NW of SVE-69 where
product from well was pumped out of well by
float pump - cleaned by IES on 2/20/04.

0900 Roll 53 Photo 10 of Ryan loosening heat
exchanger of thermox 1 for removal
on 3/1/04

J. E. Peters

(56)

2/27/04 J. E. Pate

0930 Review MWH Chem Ox WP
 1000 Spoke w/ L. Orosz - MWH planning
 to hook up short term electric
 pump to be placed in ONCA ISVE
 wells for localized dewatering.
 Plan to move from well to well -
 pull electric from blower shed and
 discharge to water conveyance lines
 below ground through pitless adapter.
 Similar controls to existing pumps
 used onsite.

1035 Left Site for day

~~J. E. Pate
 2/27/04~~

(57)

3/1/04 J. E. Pate

0735 Arrive onsite; light rain, overcast, 40°F
 light SE wind

Personnel Present:

Lee Orosz	MWH
Terry Frisk	Ryan
Dave Hinkel	Ryan
Jerry Clarke	Ryan
Lyle Peters	BVSPC

Activities Today - Crane lift to move
 Durr thermox heat exchanger.

0800 Crane operator (Central Crane) onsite,
 set up crane. L. Orosz with MWH shutting
 down GWTP and Thermox 2 for pick.

0815 Spoke w/ L. Orosz he reported MWH ready
 to set up temporary pump in ONCA SBPA
 ISVE wells this week. MWH to run electrical
 from building and will discharge water
 to the underground conveyance piping
 through the pitless adapter at a DPE well -
 one on either side of road. MWH to record
 total flow and rate.

0825 Roll 34 photo 11 facing NE of Doug Hennicks
 locking out electrical supply for crane pick.

0840 MWH + Central Crane performing crane
 inspection.

J. E. Pate



Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 52 Photo #4

Date: 02-05-04 Time: 08:43

Photographer: Leigh Peters

Description: Photo facing northwest showing Lee Orosz cleaning the pH probe for the GWTP effluent.

Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 52 Photo #5

Date: 02-5-04 Time: 08:45

Photographer: Leigh Peters

Description: Photo facing northwest showing Lee Orosz testing the pH probe for the GWTP effluent in the buffer solution.



Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 52 Photo #6

Date: 02-05-04 Time: 09:05

Photographer: Leigh Peters

Description: Photo facing north showing the interior of the Durr thermal oxidizer unit 1 heat exchanger.

Site: American Chemical Service, Inc.

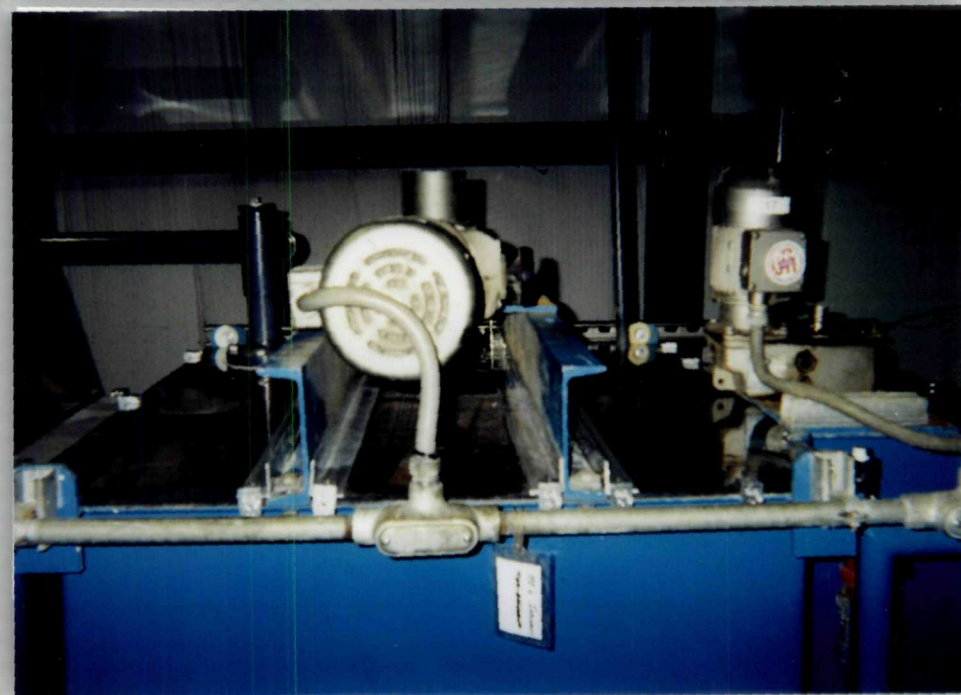
Proj. #: 46526

Roll: 52 Photo #7

Date: 02-05-04 Time: 09:08

Photographer: Leigh Peters

Description: Photo facing north showing the frozen condensate in the Durr thermal oxidizer unit 1 heat exchanger.



Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 53 Photo #1

Date: 02-27-04 Time: 07:59

Photographer: Leigh Peters

Description: Photo facing southeast showing the safety lifeline located above the lamella clarifier attached to steel support beams.

Site: American Chemical Service, Inc.

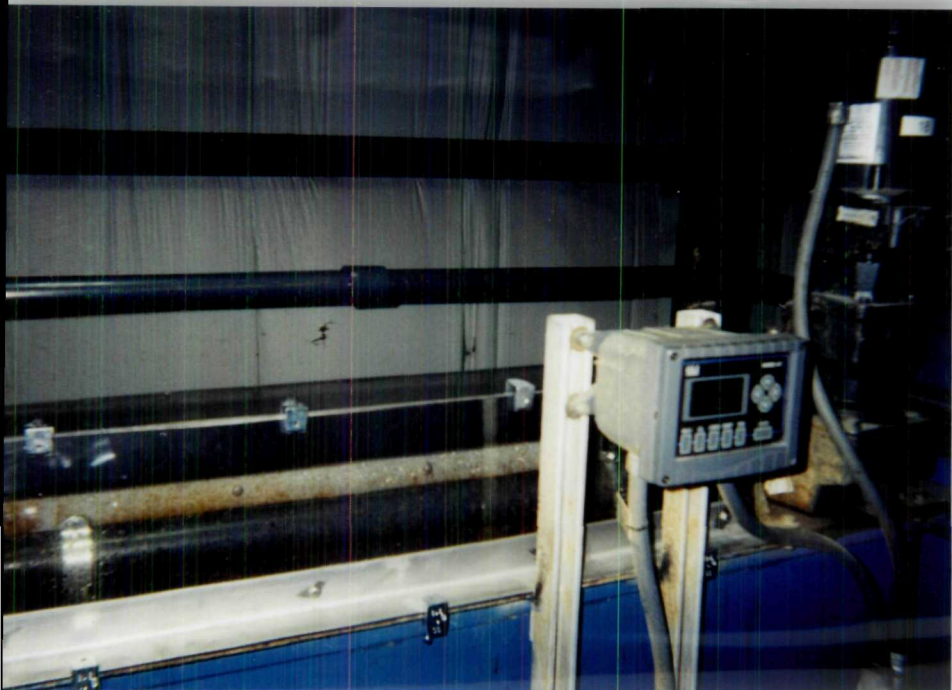
Proj. #: 46526

Roll: 53 Photo #2

Date: 02-27-04 Time: 08:00

Photographer: Leigh Peters

Description: Photo facing south showing the Plexi-Glass cover installed over the lamella clarifier.



052

Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 53 Photo #3

Date: 02-27-04 Time: 08:01

Photographer: Leigh Peters

Description: Photo facing south showing the Plexi-Glass cover installed over the lamella clarifier and the vent pipe for the vapors.



052

Site: American Chemical Service, Inc.

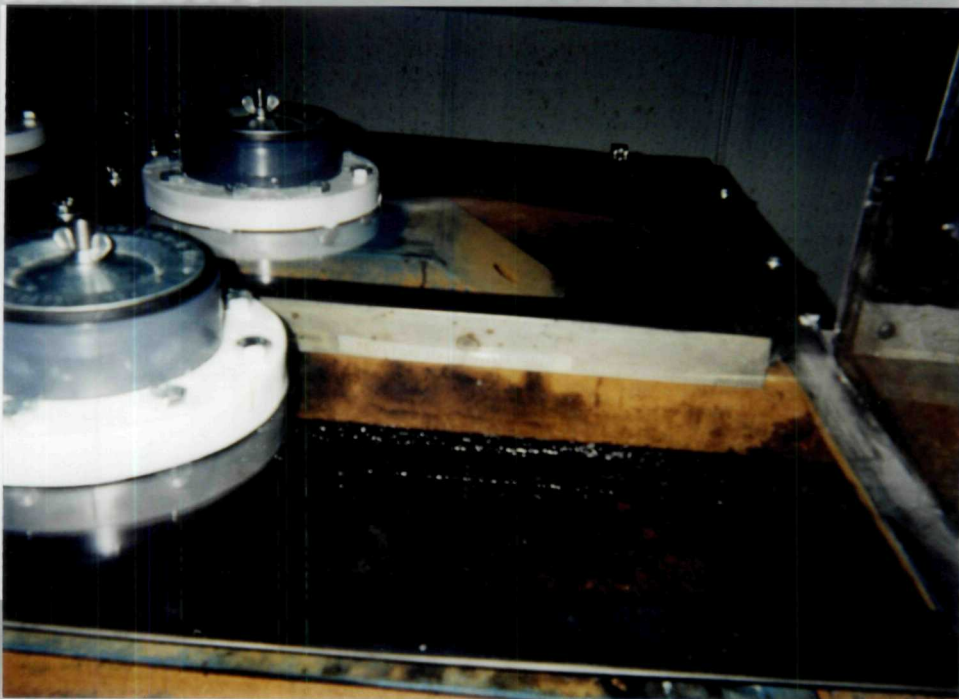
Proj. #: 46526

Roll: 53 Photo #4

Date: 02-27-04 Time: 08:02

Photographer: Leigh Peters

Description: Photo facing south showing the Plexi-Glass cover installed over the lamella clarifier.



Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 53 Photo #5

Date: 02-27-04 Time: 08:03

Photographer: Leigh Peters

Description: Photo facing southeast showing the product
accumulating in the lamella clarifier.

Site: American Chemical Service, Inc.

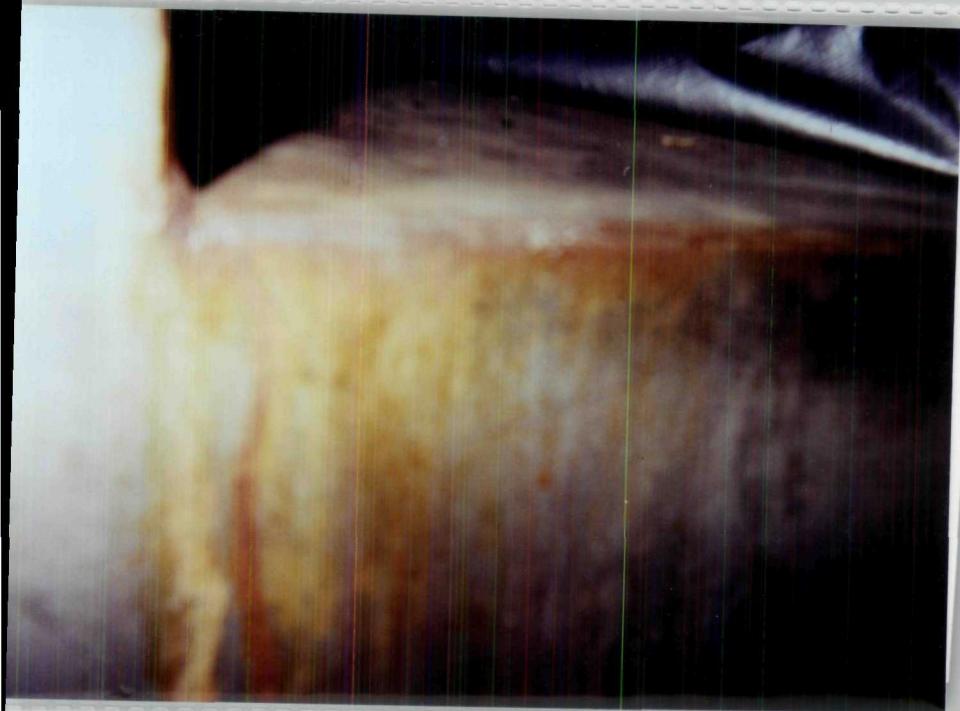
Proj. #: 46526

Roll: 53 Photo #6

Date: 02-27-04 Time: 08:07

Photographer: Leigh Peters

Description: Photo facing southeast of the entire safety
lifeline installed over the lamella clarifier.



Site: American Chemical Service, Inc.

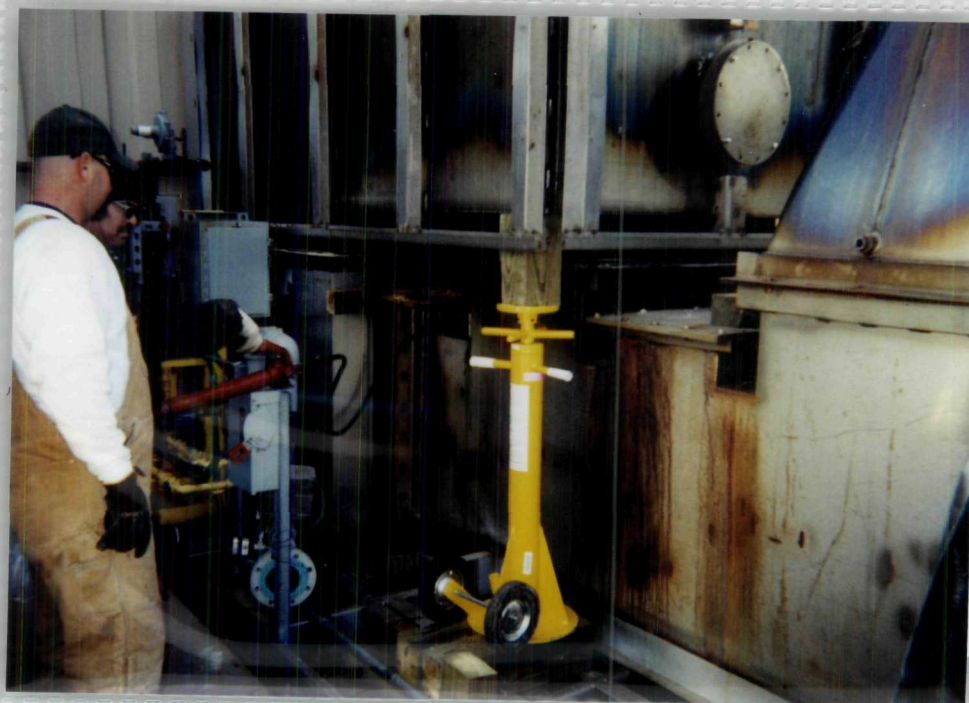
Proj. #: 46526

Roll: 53 Photo #7

Date: 02-27-04 Time: 08:10

Photographer: Leigh Peters

Description: Photo facing northeast showing a failed, cracked weld present on the exterior stainless steel housing for the Durr thermal oxidizer unit 1 heat exchanger.



Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 53 Photo #8

Date: 02-27-04 Time: 08:15

Photographer: Leigh Peters

Description: Photo facing northeast showing Ryan Construction raising up the Durr thermal oxidizer unit 1 oxidizer chamber to separate it from the heat exchanger.



Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 53 Photo #9

Date: 02-27-04 Time: 08:43

Photographer: Leigh Peters

Description: Photo facing northwest showing the stained concrete pad at SVE-69 where product was pumped out of the well because of a faulty discharge pipe.

Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 53 Photo #10

Date: 02-27-04 Time: 09:00

Photographer: Leigh Peters

Description: Photo facing north showing Ryan Construction loosening the Durr thermal oxidizer unit 1 heat exchanger for removal.